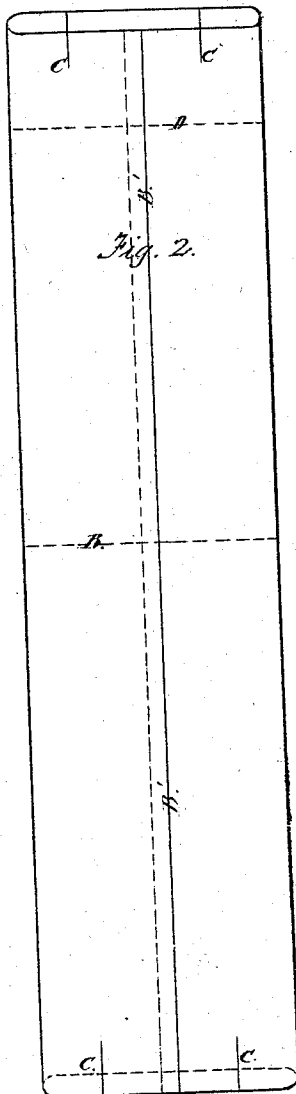
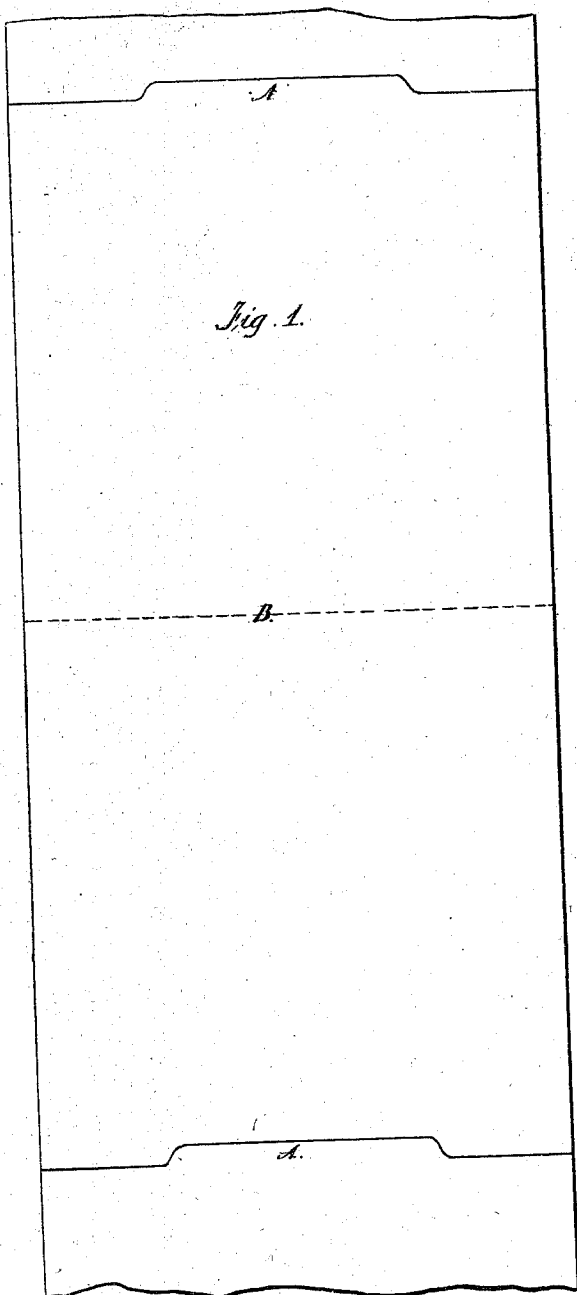


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Paper Bag.

Patented Aug 2 1870.

No 105,877.



Witnesses:

Henry Adams
W. H. Bennett

Inventor:

Alfred Adams

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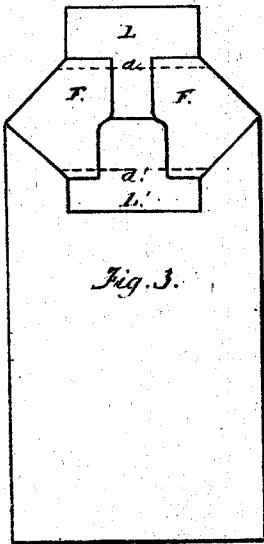


Fig. 3.

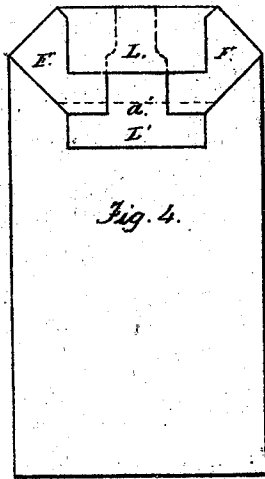


Fig. 4.

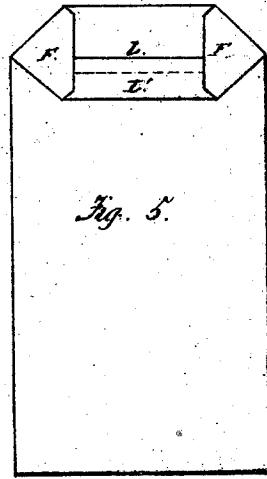


Fig. 5.

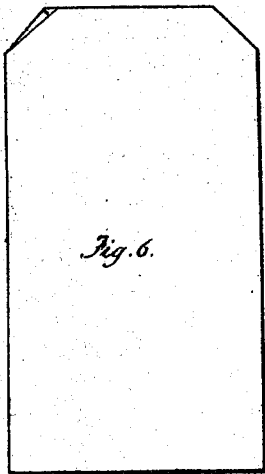


Fig. 6.

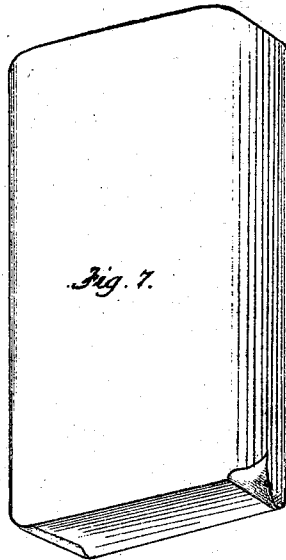


Fig. 7.

Witnesses:
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UNITED STATES PATENT OFFICE.

ALFRED ADAMS, OF CHAGRIN FALLS, OHIO.

IMPROVEMENT IN PAPER BAGS.

Specification forming part of Letters Patent No. 105,877, dated August 2, 1870.

To all whom it may concern :

Be it known that I, ALFRED ADAMS, of Chagrin Falls, in the county of Cuyahoga and State of Ohio, have invented certain Improvements in Paper Bags, of which the following is a specification :

The object of this invention is to produce a satchel-bottom paper bag, the bottom of which shall be readily folded into the most desirable form, securing greater facility and therefore greater economy in its manufacture, and thereby obviating the most objectionable features of all kinds of satchel-bottom bags as now made. These results are secured by the peculiar construction of the bottom, as hereinafter explained, reference being had to the accompanying drawing, like letters representing like parts.

Figure 1 represents a portion of a continuous sheet of paper of which the bags are made, which is divided into sheets of the desired length at the irregular lines A A, the sheet between the lines A A being of sufficient length to make two bags. Fig. 2 represents the sheet folded into a tube, the edges of which are lapped and secured by paste or its equivalent, at the longitudinal lines B'. It will be noticed that one side of each end of the tube projects beyond the other side, this result being accomplished without any loss of paper. The tube is then divided at the dotted line B, or the sheet may be thus divided at the dotted line B, Fig. 1, before the tube is made, making two tubes of like shape and size, each of which is afterward cut longitudinally at the lines C C, to facilitate the folding of the bottom, and, in connection with the projecting side, as explained, securing to the bottom its peculiar construction, the great advantages of which will hereinafter appear. Fig. 3 represents the first fold in forming the bottom, which is made by separating the two sides of the end, the side L being held in its original position, and the shorter side L' being folded back over a thin rigid plate lying across the tube, the upper edge of which plate is at the dotted line D, Fig. 2.

This single simple operation brings the lateral sides F F into the desired position, as shown in Fig. 3.

The longer side L is then folded at the

dotted line a down upon the lateral sides F F after the application of paste, or its equivalent, as shown in Fig. 4.

The shorter side is then folded at the line a' over upon the lateral side F F, and the lower edge of the longer side L, as shown in Fig. 5, bringing the upper edge of the shorter side L' up to and even with a horizontal line drawn through the middle of the bottom, thereby enabling the two sides of the bottom to be easily folded together, as in Fig. 6, the upper edge of the shorter side L' forming the creasing line.

Fig. 7 represents the bag when distended or filled.

The great advantages of my invention are these: It will be readily seen that, by making one side of the end of the tube longer than the other, these sides can be separated, preparatory to folding the bottom, with more ease and rapidity than if they were of even length, as is the case in all other satchel-bottom bags, thus largely reducing the expense of manufacture.

And, furthermore, when the bottom is made the lap or double thickness formed by the bringing together of the sides L and L', lies just outside of the middle or dividing line of the bottom, and forms a creasing line for the last or finishing fold. And, when the last fold is made, there being one or more thicknesses of paper less than in other bags at the point where the crease or fold lies, the tendency of the bottom to spring back or resume its former shape is entirely obviated. This tendency being so great an obstacle in the manufacture of satchel-bottom bags that the greater portion of them are made and considered finished, as shown in Fig. 5, without folding the two sides of the bottom together, notwithstanding the great objection thereto, to wit, the extra thicknesses of paper, caused by the lapping of one-half of the bottom down upon the side of the bag, almost invariably interferes with the printing or branding of the bag, making many imperfect impressions, as well as being very destructive to the types used, and also to the tympan of the press.

Inasmuch as paper sacks are rarely, if ever, used without being branded by printing, the

force of this objection will be readily perceived.

What I claim as my invention, and desire to secure by Letters Patent, is—

Forming the double blank, substantially as shown in Fig. 1, and subsequently cutting, pasting, and folding it, substantially as pro-

gressively shown in Figs. 2, 3, 4, and 5, to form satchel-bottom bags.

ALFRED ADAMS.

Witnesses:

GEORGE A. NOLEN,
H. GARRETT.